

AMENDMENTS TO THE CLAIMS

Please amend Claims 1, 7, 10, 11 and 13; and, add new Claims 14-18 as follows.

LISTING OF CLAIMS

1. (currently amended) An air conditioner for a vehicle having a passenger compartment, the air conditioner comprising:

a heat exchanger for performing a heat exchange with air;

a case accommodating the heat exchanger, for defining an air passage through which air flows into the passenger compartment, the case being provided with a defroster opening through which air flows toward an inner surface of a front windshield of the vehicle, a face opening through which air flows toward an upper side of the passenger compartment, and a foot opening through which air flows toward a lower side of the passenger compartment, at positions downstream from the heat exchanger; and

a mode selecting device for opening and closing the defroster opening, the face opening and the foot opening, the mode selecting device including first and second rotary doors, wherein:

each of the first and second rotary doors includes a rotation shaft, an outer peripheral door surface separated from a center axial line of the rotation shaft to a radial outside by a predetermined dimension, and two side plates connected to the rotation shaft and end portions of the outer peripheral door surface in an axial direction of the rotation shaft; [[and]]

[[one of]] the first ~~and second~~ rotary [[doors]] door is disposed to open and ~~close~~ one of the defroster opening, the face opening and the foot opening while at least

partially closing the other two of the defroster opening, the face opening and the foot opening and to close the one of the defroster opening, the face opening and the foot opening while opening the other two of the defroster opening, the face opening and the foot opening, and the other one of the first and second rotary [[doors]] door is disposed to open and close the other two of the defroster opening, the face opening and the foot opening;

the first rotary door and the second rotary door are located along an air flow direction; and

the second rotary door is located downstream from the first rotary door in the air flow direction.

2. (withdrawn) The air conditioner according to claim 1, wherein:

each of the first and second rotary doors is formed into a gate shape by the outer peripheral door surface and the two side plates to have an inner space of the gate shape, through which air after passing through the heat exchanger flows;

the defroster opening, the face opening and the foot opening are arranged outside of the gate shapes of the first and second rotary doors;

each of the first and second rotary doors is provided with a seal portion on peripheral end portions of the outer peripheral door surface and the two side plates;

the case has seal surfaces each of which is provided around each of the openings; and

the seal portion press-contacts the seal surface of the case so that a communication between the inner space of the gate shape and each of the openings is shut.

3. (withdrawn) The air conditioner according to claim 2, wherein:
each of the side plates is formed substantially into a fan shape having a pivot; and
the rotation shaft is disposed to protrude outside of the side plates from the pivots of the side plates.

4. (withdrawn) The air conditioner according to claim 2, wherein:
the rotation shaft is constructed with two shaft parts disposed at the pivots of the side plates and separated from each other in the axial direction; and
the shaft parts are disposed to protrude outside substantially in a direction perpendicular to the side plates.

5. (withdrawn) The air conditioner according to claim 1, wherein the first and second rotary doors are disposed such that the outer peripheral door surface and the side plates of the second rotary door are arranged inside of the outer peripheral door surface and the side plates of the first rotary door.

6. (original) The air conditioner according to claim 1, wherein:
the first rotary door is disposed to open and close the foot opening; and

the second rotary door is disposed to open and close the defroster opening and the face opening.

7. (currently amended) The air conditioner according to claim 6, wherein:

the case includes right and left side wall portions in ~~a vehicle width direction~~
the axial direction of the shaft; and

the foot opening is provided in both of the right and left side walls ~~[[to]]~~
opposite to the side plates of the first rotary door.

8. (withdrawn) The air conditioner according to claim 1, wherein:

the first rotary door is disposed to open and close the face opening; and

the second rotary door is disposed to open and close the defroster opening and the foot opening.

9. (withdrawn) The air conditioner according to claim 1, wherein:

the heat exchanger includes a heating heat exchanger for heating air;

the heating heat exchanger is disposed in the case to form a hot air passage through which air passes the heating heat exchanger, and a cold air passage through which air bypasses the heating heat exchanger;

the foot opening is provided to be near the cold air passage than the hot air passage; and

the air passage of the case is provided with a hot air bypass passage through which air in the hot air passage is branched into right and left sides of the cold air passage and is introduced into the foot opening.

10. (currently amended) The air conditioner according to claim 1, wherein each of the first and second rotary doors are disposed in the case such that the side plates are arranged at right and left side ~~in a vehicle width direction~~ of the case in the axial direction.

11. (currently amended) An air conditioner for a vehicle having a passenger compartment, the air conditioner comprising:

a heat exchanger for performing a heat exchange with air;

a case accommodating the heat exchanger, for defining an air passage through which air flows into the passenger compartment, the case being provided with a defroster opening through which air flows toward an inner surface of a front windshield of the vehicle, a face opening through which air flows toward an upper side of the passenger compartment, and a foot opening through which air flows toward a lower side of the passenger compartment, at positions downstream from the heat exchanger; and

a mode selecting device for opening and closing the defroster opening, the face opening and the foot opening, the mode selecting device including first and second rotary doors, wherein:

each of the first and second rotary doors includes a rotation shaft, an outer peripheral door surface separated from a center axial line of the rotation shaft to a radial outside by a predetermined dimension, and two side plates connected to the rotation

shaft and end portions of the outer peripheral door surface in an axial direction of the rotation shaft;

the first rotary door is disposed to open ~~and close~~ the foot opening while at least partially closing the defroster opening and the face opening and to close the foot opening while opening the defroster opening and the face opening, and the second rotary door is disposed to open and close the defroster opening and the face opening;

the face opening is partitioned into a center face opening portion through which air is blown toward a center upper side ~~of the passenger compartment in a width direction of the vehicle~~ of the case, and a side face opening portion through which air is blown toward a side upper side ~~of the passenger compartment in the width direction~~ case; [[and]]

the second rotary door is disposed to maintain an open state of the side face opening portion even while closing the center face opening portion;

the first rotary door and the second rotary door are located along an air flow direction; and

the second rotary door is located downstream from the first rotary door in the air flow direction.

12. (original) The air conditioner according to claim 11, wherein:

the second rotary door includes a seal portion disposed for fully closing the center face opening portion at a portion corresponding to the center face opening portion, and an air amount adjustment member disposed for adjusting an air amount blown from the side face opening portion at a position corresponding to the side face opening portion.

13. (currently amended; withdrawn) The air conditioner according to claim 11, wherein:

~~the second rotary door is disposed downstream of the first rotary door in an air flow direction in the case;~~

the first rotary door is disposed to open and close the foot opening and a communication port through which air flows into an inner space of the second rotary door; and

the air passage of the case is provided with a bypass passage portion through which an upstream portion of the first rotary door directly communicates with the side face opening portion.

14. (new) The air conditioner according to claim 11, wherein the outer peripheral door surface of the second rotary door opens and closes the center face opening portion and the defroster opening.

15. (new) The air conditioner according to claim 14, the rotation shaft of the second rotary door is positioned below the outer peripheral door surface of the second rotary door.

16. (new) The air conditioner according to claim 14, wherein the center face opening portion, the side face opening portion and the defroster opening are provided in an upper surface of the case.

17. (new) The air conditioner according to claim 11, further comprising:
a plate member that is rotatable at a position adjacent to the second rotary door and adjusts an air amount flowing through the side face opening portion.

18. (new) The air conditioner according to claim 17, wherein the plate member has a shaft extending from the rotation shaft of the second rotary door, and the shaft of the plate member is rotated integrally with the rotation shaft of the second rotary door such that a passage area of the side face opening portion is changed in accordance with a rotation position of the second rotary door.